

LISTING OF THE CLAIMS:

1. (Canceled)

2. (Previously Amended) The emitter as claimed in claim 11, wherein at least one of said first and second mirrors is linked directly by opposed faces to two of said lengths of said optical fiber.

3. (Previously Amended) The emitter as claimed in claim 11, wherein at least one of said first and second mirrors is linked, via an associated optical coupler, to two of said lengths of said optical fiber.

4. (Previously Amended) The emitter as claimed in claim 3, wherein said optical coupler comprises two lenses optically linking said two of said lengths of the optical fiber, the mirror associated with said optical coupler being placed between said two lenses.

5. (Previously Amended) The emitter as claimed in claim 3, wherein said optical coupler comprises at least one graded-index lens.

6. (Previously Amended) The emitter as claimed in claim 11, further comprising an optical element that prevents an electromagnetic pulse generated by said generator from returning toward said generator.

7. (Previously Amended) The emitter as claimed in claim 11, wherein said generator is operable to generate at least two electromagnetic pulses, of different wavelengths.

8. (Currently Amended) A test system for determining the losses of a fiber-optic component, said system comprising:

an optical source operable to emit at least one electromagnetic pulse;

a photoreceiver operable to measure characteristics of an electromagnetic pulse emitted by said optical source and transmitted by a fiber-optic component; and

a data acquisition, storage and processing device which receives the measurements generated by said photoreceiver for said fiber-optic component to be tested and for a reference fiber-optic component and which determines, on the basis of these measurements, the losses of said fiber-optic component to be tested, wherein:

said optical source comprises the an emitter of claim 11
including:

a generator that generates at least one electromagnetic
pulse;

at least one optical fiber that transmits an
electromagnetic pulse generated by said generator for the
purpose of emitting said electromagnetic pulse; and

an optical system including an optical cavity:

which is disposed in a path of said
electromagnetic pulse transmitted by said optical
fiber; and

which has an input provided with a first partially
reflecting mirror and an output provided with a second
partially reflecting mirror, wherein:

said first partially reflecting mirror is placed
between a first fiber length and a second fiber length of
the optical fiber, said first fiber length being linked to
the generator,

said second partially reflecting mirror is placed
between the second fiber length and a third fiber length of
the optical fiber, said second fiber length being used to
link said first and second mirrors together, and

the length of said second fiber length and the transmission and reflection ratio of said first and second mirrors are adjusted such that, there is created at the output of said optical cavity, from a single said electromagnetic pulse incident on said optical cavity, a train of emitted electromagnetic pulses which have variable geometric characteristics and are associated with said incident electromagnetic pulse.

9. (Previously Amended) The test system as claimed in claim 8, wherein the optical fiber of the emitter for emitting electromagnetic pulses has at least two characteristics, the core diameter and the numerical aperture, which are predetermined and in that at least one of said characteristics of said optical fiber is identical to that of the fiber-optic component to be tested.

10. (Currently Amended) A method of determining the value of at least one characteristic parameter of a fiber-optic component using an emitter that includes a generator that generates at least one electromagnetic pulse, at least one optical fiber that transmits an electromagnetic pulse generated by said generator for the purpose of emitting said electromagnetic pulse, and an

optical system including an optical cavity which is disposed in a path of said electromagnetic pulse transmitted by said optical fiber and which has an input provided with a first partially reflecting mirror and an output provided with a second partially reflecting mirror, wherein said first partially reflecting mirror is placed between a first fiber length and a second fiber length of the optical fiber, said first fiber length being linked to the generator, said second partially reflecting mirror is placed between the second fiber length and a third fiber length of the optical fiber, said second fiber length being used to link said first and second mirrors together, and the length of said second fiber length and the transmission and reflection ratio of said first and second mirrors are adjusted such that, there is created at the output of said optical cavity, from a single said electromagnetic pulse incident on said optical cavity, a train of emitted electromagnetic pulses which have variable geometric characteristics and are associated with said incident electromagnetic pulse The use of the emitter specified under claim 11, in order to determine the value of at least one characteristic parameter of a fiber-optic component, in which use said method comprising:

- a) emitting at least one electromagnetic pulse is generated, which is emitted into said fiber-optic component;

b) carrying out measurements relating to said at least one electromagnetic pulse transmitted by said fiber-optic component are carried out; and

c) determining said characteristic parameter is determined at least from said measurements,

wherein characterized in that, in step a), an electromagnetic pulse train is generated by means of said emitter, at least some of the electromagnetic pulses of which have different values for at least one optical characteristic, and in that, in step c), the value of said characteristic parameter is determined for each of said different electromagnetic pulses of said pulse train.

11. (Currently Amended) An emitter for emitting electromagnetic pulses, comprising:

a generator that generates at least one electromagnetic pulse;

at least one optical fiber operable to transmit that transmits an electromagnetic pulse generated by said generator for the purpose of emitting said electromagnetic pulse; and

an optical system including an optical cavity:

which is disposed in a path of said electromagnetic pulse transmitted by said optical fiber; and

which has an input provided with a first partially reflecting mirror and an output provided with a second partially reflecting mirror, wherein:

 said first partially reflecting mirror is placed between a first fiber length and a second fiber length of the optical fiber, said first fiber length being linked to the generator,

 said second partially reflecting mirror is placed between the second fiber length and a third fiber length of the optical fiber, said second fiber length being used to link said first and second mirrors together, and

 the length of said second fiber length and the transmission/reflection transmission and reflection ratio of said first and second mirrors are adjusted such that, there is created at the output of said optical cavity, from a single said electromagnetic pulse incident on said optical cavity, a train of emitted electromagnetic pulses which have variable geometric characteristics and are associated with said incident electromagnetic pulse.